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<u>ABSTRACT</u>

A programmatic time-gap defect correction apparatus and method corrects errors

which may go undetected by a computer system. Buffer underruns or overruns, which may

incur errors in data transfers, yet remain undetected and uncorrected in a computer system,

are corrected by an error avoidance module in accordance with the invention. Bytes

transferred to and from buffers, used by an I/O controllers to temporarily store data while

being transferred between synchronous and asynchronous devices, are counted and an error

condition is forced based on the count. If the count exceeds the capacity of the buffer, an

error condition is forced, thereby reducing chances that errors are incurred into the data

transfer.

Docket: 2456.2.9

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